



## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,478	06/14/2001	Geoffrey Howard Blackham	GJ-223J	7893
7590 03/24/2004		EXAMINER LIU, MING HUN		
Iandiorio & Teska				
260 Bear Hill Road Waltham, MA 02451-1018			ART UNIT	PAPER NUMBER
,			2675	1 -
			DATE MAILED: 03/24/2004	15

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	Application No.	Applicant(s)				
Office Addison Occasions	09/881,478	BLACKHAM ET AL.				
Office Action Summary	Examiner	Art Unit				
	Ming-Hun Liu	2675				
The MAILING DATE of this communication ap Period for Reply	opears on the cover sheet with th	e correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPITHE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply b ply within the statutory minimum of thirty (30) d will apply and will expire SIX (6) MONTHS for the cause the application to become ABANDO	e timely filed  days will be considered timely.  rom the mailing date of this communication.  DNED (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
· — · · · · · · · · · · · · · · · · · ·						
3) Since this application is in condition for allow	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4)  Claim(s) 11-18 is/are pending in the application 4a) Of the above claim(s) is/are withdress 5)  Claim(s) is/are allowed. 6)  Claim(s) 11-18 is/are rejected. 7)  Claim(s) is/are objected to. 8)  Claim(s) are subject to restriction and/	awn from consideration.					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the corre	, ,	·				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of:  1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the pri application from the International Burea * See the attached detailed Office action for a list	nts have been received. nts have been received in Applic ority documents have been rece au (PCT Rule 17.2(a)).	eation No eived in this National Stage				
Attachmount(a)						
Attachment(s)  1) Notice of References Cited (PTO-892)	4) Interview Summ	ary (PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Ma	I Date				
<ol> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date</li> </ol>	5) Notice of Inform 6) Other:	al Patent Application (PTO-152)				

4

Application/Control Number: 09/881,478

Art Unit: 2675

## DETAILED ACTION

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of US Patent 5,320,534 to Thomas and Us Patent 6,356,664 to Dunn et al.

In reference to claim 11, Thomas teaches a multi-channel image display device that includes two low-resolution image channels for the background scene (figure 1, projectors 32 and 34) and a high-resolution foreground scene (figure 1, item 18) where the foreground image maybe superimposed at any location of the background (column 2, lines 39-47). The difference between Thomas' invention and the claimed invention lies in the how the two image qualities are defined and implemented. Thomas offers the possibility of using different frame rates for background and foreground images in an attempt to reduce the "image generation costs and optimize the display to human visual system requirements" (column 5, lines 37-40). This idea of different foreground and background frame rates is elaborated by Dunn disclosure (column 7, lines 25-32).

In reference to claim 12, Dunn describes that the different frame rates are proportionally divided to insure synchronization of the different frame rate levels (column 6, lines 59-67).

In reference to claim 13-16, Dunn invention teaches that figures with higher importance are shown with at a higher frame rate. As described in column 8, lines 32-

Application/Control Number: 09/881,478

Art Unit: 2675

67, target objects of high importance are assigned higher importance ratings, equaling a higher frame rate. As made apparent in the description and figure 9 there can be multiple objects with high importance ratings.

In reference to claim 17, Thomas teaches that the display apparatus include a head tracker (column 4, lines 17-23).

In reference to claim 18, Thomas' invention is used for flight, air traffic control and driving simulation (column 2, lines 49-51).

## Conclusion

3. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ming-Hun Liu whose telephone number is 703-305-8488. The examiner can normally be reached on Mon-Fri.

Application/Control Number: 09/881,478

Art Unit: 2675

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Saras can be reached on 703-305-9720. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ming-Hun Liu

DENNIS-DOON CHOW PRIMARY EXAMINER